REMARKS

Claims 1, 4-12 and 15 remain in this application, with Claims 1 and 12 being in independent form. By the present amendment, Claims 3 and 14 have been cancelled, and Claims 1 and 12 have been amended (Claim 1 incorporates the limitations of cancelled Claim 3, and Claim 12 incorporates the limitations of cancelled Claim 14). Adequate support for the amendments is provided in the specification and in the figures. No new matter or issues are believed to be introduced by the amendments.

In the Office Action mailed on April 19, 2005, Claims 1, 3-12, 14 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Garcia-Luna-Aceves in view of Katz. Claims 3 and 14 have been cancelled.

Applicant has amended independent Claims 1 and 12 in a manner which is believed to better define Applicant's invention and to overcome the rejection. In particular, Applicant has amended independent Claim 1 to include the limitations of cancelled Claim 3 and amended independent Claim 12 to include the limitations of cancelled Claim 14.

It is respectfully submitted that Garcia-Luna-Aceves does not disclose at least the features of the resolving step recited by Applicant's Claim 1, namely, "resolving time slot allocation conflicts occurring when at least two transceiver nodes of said network of transceiver nodes are allocated time slots belonging to an identical time slot sub-set and the distance between said at least two transceiver nodes is less than a predetermined distance threshold, wherein said resolving step comprises the step of allocating to each one of said at least two transceiver nodes time slots belonging to a different time slot sub-set of said identical time slot sub-set." Claim 12 includes similar recitations as Claim 1.

In Garcia-Luna-Aceves, nodes with conflicting ASLs (namely, nodes that are "allocated time slots belonging to an identical time slot sub-set and the distance between said at least two transceiver nodes is less than a predetermined distance threshold") must choose alternative ASLs (column 16, lines 58-60); in other words, the Garcia-Luna-Aceves resolving step comprises the step of allocating to each one of said at least two transceiver nodes time slots belonging to a different time slot sub-set, changing the original time slot sub-set allocation. In contrast, the Applicant's resolving step "comprises the step of allocating to each one of said at least two transceiver nodes time slots belonging to a different time slot sub-set of said identical time slot sub-set," keeping the original time slot sub-set allocation. This is accomplished by dividing the identical time slot sub-set into multiple, smaller time slot sub-sets, and having each of the conflicted nodes assign itself a different, smaller time slot sub-set of the identical time slot sub-set. This would be equivalent to breaking the conflicting ASL into multiple, smaller sub-ASLs, and assigning to each conflicted node a different sub-ASL, something which is not disclosed, or suggested, or otherwise implied in Garcia-Luna-Aceves.

Katz does not cure the deficiencies of Garcia-Luna-Aceves. Katz teaches "a method for directional radio communication and mobile communication network between a first station and a second mobile", and it does not disclose or suggest any steps for resolving time slot allocation conflicts. In particular, the disclosure of Katz fails to disclose or suggest at least the resolving step recited by Applicant's Claim 1, and similarly recited by Applicant's Claim 12, namely, "resolving time slot allocation conflicts occurring when ..., wherein said resolving step comprises the step of allocating to each one of said at least two transceiver nodes time slots belonging to a different time slot sub-set of said identical time slot sub-set."

Therefore, neither of the two cited references discloses or suggests at least the resolving feature as recited by Applicant's amended independent Claims 1 and 12.

Furthermore, Katz fails to disclose the element of allocating time slots to a node based on the node's position in space, namely "periodically identifying a set of space coordinates; and allocating to said each one of said transceiver nodes time slots belonging to the time slot sub-set assigned by said common function to the point in space identified by the periodically identified set of space coordinates," as recited by Applicant's Claims 1 and 12.

a) In the Katz disclosure, the hybrid SDMA/TDMA system would allocate time slots to a node's *antenna beam directions*, (column 1, lines 15-24 and column 2, lines 11-17), regardless of the node's geographic position; this is different from the method disclosed by Applicant's Claim 1, and the system disclosed by Applicant's Claim 12, which allocate time slots to a node based on the node's geographic position, regardless of the intended receiver's relative direction (i.e., "periodically identifying a set of space coordinates; and allocating to said each one of said transceiver nodes time slots belonging to the time slot sub-set assigned by said common function to the point in space identified by the periodically identified set of space coordinates" as recited by Applicant's Claims 1 and 12).

b) In the system described by Katz, SDMA can only be applied to transceiver networks having directional antennas, and therefore, the SDMA concept is not applicable to transceiver networks having only omni-directional antennas. In the contrary, allocating time slots based on a transmitter's geographic position (with respect to a common coordinate system) can be applied to transceiver networks having directional, omni-directional, or both types of antenna elements.

In accordance to the above reasons, independent Claims 1 and 12 are not obvious over Garcia-Luna-Aceves, Katz or the combination thereof. Therefore, the Applicant respectfully requests withdrawal of the rejection with respect to independent Claims 1 and 12 and allowance thereof. Dependent Claims 4-11 and 15 depend from Claims 1 and 12, and therefore are allowable for at least the same reasons given for Claims 1 and 12. Therefore, withdrawal of the rejection with respect to dependent Claims 4 – 11 and 15 and allowance thereof are respectfully requested.

In view of the foregoing remarks and amendments, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1, 4-12 and 15, are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at (631) 501-5706. Please also note the new mail correspondence address below for all mail communications regarding the subject patent application. A change of correspondence address was filed on March 15, 2002.

Respectfully submitted,

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